

## **REMARKS/ARGUMENTS**

### **I. General Remarks and Disposition of Claims.**

Claims 1-78 are pending. Claims 1-18, 22-37, 41-57 and 61-75 stand rejected. Claims 19-21, 38-40, 58-60 and 76-78 are objected to. Applicants have not included a listing of claims in this Response because Applicants have not made any claim amendments herein. *See Manual of Patent Examining Procedure* § 714(II)(C) (2004) (hereinafter “MPEP”)

Applicants respectfully request reconsideration of the application in view of the remarks contained herein.

### **II. Remarks Regarding Rejections Under 35 U.S.C. § 102.**

The Examiner has rejected claims 1-2, 4-9, 11-16, 18, 23, 25-28, 30-35, and 37 as being anticipated by U.S. Pat. App. Pub. No. 2003/0000425 to Kepler et al. (“*Kepler*”). (Office Action at 2.) With respect to this rejection, the Examiner stated:

[*Kepler*] teaches in paragraph [0004] a method of cementing in a subterranean formation penetrated by a well bore comprising the steps of: placing a cement composition into the well bore, wherein the cement composition comprises a first cementitious component having a first set time and a second cementitious component comprising microencapsulated cement particles, wherein the second cementitious component has a second set time that is delayed relative to the first set time of the first cementitious component; allowing the first cementitious component to at least partially set having at least one void; and allowing the second cementitious component to set after a delay period so as to cure at least one void that forms during the setting of the first cementitious component.

(Office Action at 2.) Applicants respectfully disagree because *Kepler* does not disclose or suggest every element recited in the subject claims as required to anticipate the claims under 35 U.S.C. § 102(b). MPEP § 2131.

In particular, *Kepler* does not disclose or suggest the step of “placing a cement composition into the well bore” as recited in Applicants’ independent claims 1 and 23. Nowhere does *Kepler* disclose or suggest this recitation. *Kepler* is directed to “cement mixtures which prevent or reduce the formation of micro-cracks and, more particularly, to an improved cement mixture of a conventional cement and a cement that is micro-encapsulated in time-release polymer coatings.” *Kepler*, ¶ 0001. The Examiner cites paragraph [0004] of *Kepler* for support that *Kepler* discloses “placing a cement composition into the well bore.” (Office Action

at 2.) However, paragraph [0004] of *Kepler* does not disclose or suggest placing these cement mixtures into a well bore as suggested by the Examiner:

According to the invention, there is provided an improved cement mixture for preventing or reducing the formation of micro-cracks in a concrete structure, the cement mixture comprising a conventional portland cement and a second cement which is micro-encapsulated in a time-release polymer coating so the second cement does not hydrate for at least a few, i.e., about three, hours after the bulk of the conventional cement is hydrated so as to provide autogenous healing of small cracks in the concrete structure.

*Kepler*, ¶ 0004. Accordingly, *Kepler* does not disclose or suggest every element of independent claims 1 and 23.

Therefore, independent claims 1 and 23 are not anticipated by *Kepler*. The remaining rejected claims depend either directly or indirectly on independent claim 1 or 14. All these dependent claims, which include all the limitations of their corresponding independent claim, are allowable for at least the reasons cited above with respect to independent claims 1 and 14. Accordingly, Applicants respectfully request withdrawal of this rejection with respect to claims 1-2, 4-9, 11-16, 18, 23, 25-28, 30-35, and 37.

### III. Remarks Regarding Rejections Under 35 U.S.C. § 103.

#### A. Claims 3, 24, 41-48, 50-55, 57, 61-66, 68-73, and 75 Are Not Obviated by *Kepler* in View of *Simpson*.

The Examiner has rejected claims 3, 24, 41-48, 50-55, 57, 61-66, 68-73, and 75 as being unpatentable over *Kepler* in view of U.S. Pat. App. Pub. No. 2002/0185274 to Simpson et al. (*Simpson*). (Office Action at 4.) With respect to this rejection, the Examiner stated:

[I]t would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified [*Kepler's*] invention by using an expandable tubular placed into the well bore, expanding the expandable tubular, and at least on void is due to at least the use of the expandable tubular in view of [*Simpson*]. The motivation for this combination is that a fluid path that may be left between the expanded tubular and the well bore in order to provide a flow path for fluids, including cement.

(Office Action at 5.) Applicants respectfully disagree because the Examiner has not established a *prima facie* case of obviousness, in that the cited references do not teach or suggest each and every claim limitation, and there is no suggestion or motivation to combine the references with a reasonable expectation of success. See MPEP § 2142.

First, the cited references do not teach or suggest each and every limitation of Applicants' claims. *See* MPEP § 2142. In particular, independent claims 1, 23, 41, and 62 recite "placing a cement composition into the well bore." Independent claims 1 and 41 recite that "the cement composition comprises a first cementitious component having a first set time and a second cementitious component having a set second set time that is delayed relative to the first set time of the first cementitious component." And independent claims 23 and 62 recite that "the cement composition comprises a first cementitious component having a first set time and a second cementitious component comprising microencapsulated cement particles, wherein the second cementitious component has a second set time that is delayed relative to the first set time of the first cementitious component." As discussed above with respect to the § 102 rejection, *Kepler* does not teach or suggest the step of placing a cement composition into the well bore. *See* discussion *supra* Part II.

Nor can *Simpson* be used to supply this missing recitation. In fact, *Simpson* does not teach the cement composition's recited in independent claims 1, 23, 41, and 62. Accordingly, modifying *Kepler* to use the expandable tubular disclosed by *Harris*, as suggested by the Examiner, would not teach or suggest placement of the cement composition recited in Applicants' claims into a well bore. Therefore, *Kepler* in view of *Simpson* does not teach or suggest each and every limitation of these independent claims. Because the remaining rejected claims depend, either directly or indirectly, on one of these independent claims, they contain all the limitations of their corresponding independent claim, and thus *Kepler* in view of *Simpson* does not teach or suggest each and every limitation of the rejected dependent claims.

Second, there is no suggestion or motivation to combine the references with a reasonable expectation of success. *See* MPEP § 2142. *Kepler* is directed to "cement mixtures which prevent or reduce the formation of micro-cracks and, more particularly, to an improved cement mixture of a conventional cement and a cement that is micro-encapsulated in time-release polymer coatings. *Kepler*, ¶ 0001. Nowhere does *Kepler* disclose or suggest use of the disclosed cement mixture in a well bore. Rather than being directed to preventing the formation of micro-cracks, *Simpson* discloses "methods and apparatus for expanding tubulars in a well bore." *Simpson*, ¶ 0003. Accordingly, there is no motivation for combining *Kepler*'s cement mixtures (not disclosed for use in well bore) with *Simpson*'s methods and apparatus for expanding tubulars in a well bore.

For the foregoing reasons, claims 3, 24, 41-48, 50-55, 57, 61-66, 68-73, and 75 are not obviated by *Kepler* in view of *Simpson*. Accordingly, Applicants respectfully request withdrawal of this rejection with respect to claims 3, 24, 41-48, 50-55, 57, 61-66, 68-73, and 75.

**B. Claims 10 and 29 Are Not Obviated by *Kepler* in View of *Harris*.**

The Examiner has rejected claims 10 and 29 as being unpatentable over *Kepler* in view of U.S. Pat. No. 5,086,850 to Harris et al. ("*Harris*"). (Office Action at 5.) With respect to this rejection, the Examiner stated:

[I]t would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified [*Kepler*'s] invention by using cement particles with diameters not greater than about 30 microns in view of [*Harris*]. The motivation for this combination is that the use of such finely divided cement significantly reduces the waiting time required for the slurry to develop sufficient compressive strength.

(Office Action at 5-6.) Applicants respectfully disagree because the Examiner has not established a *prima facie* case of obviousness, in that the cited references do not teach or suggest each and every claim limitation, and there is no suggestion or motivation to combine the references with a reasonable expectation of success. *See* MPEP § 2142.

First, the cited references do not teach or suggest each and every limitation of claims 10 and 29, which depend, either directly or indirectly, on independent claims 1 and 23, respectively. *See* MPEP § 2142. Independent claims 1 and 23 recite "placing a cement composition into the well bore." Independent claim 1 recites that "the cement composition comprises a first cementitious component having a first set time and a second cementitious component having a set second set time that is delayed relative to the first set time of the first cementitious component." And independent claim 23 recites that "the cement composition comprises a first cementitious component having a first set time and a second cementitious component comprising microencapsulated cement particles, wherein the second cementitious component has a second set time that is delayed relative to the first set time of the first cementitious component." As discussed above with respect to the § 102 rejection, *Kepler* does not teach or suggest the step of placing a cement composition into the well bore. *See* discussion *supra* Part II.

Nor can *Harris* be used to supply this missing recitation. In fact, *Harris* does not teach the cement composition's recited in independent claims 1 and 23. Accordingly, modifying

*Kepler* to use the cement particles disclosed by *Harris*, as suggested by the Examiner, would not teach or suggest placement of the cement composition recited in Applicants' claims into a well bore. Therefore, *Kepler* in view of *Harris* does not teach or suggest each and every limitation of independent claims 1 and 23. Because claims 10 and 29 depend, either directly or indirectly, on independent claims 1 and 23, respectively, they contain all the limitations of their corresponding independent claim, and thus *Kepler* in view of *Harris* does not teach or suggest each and every limitation of claims 10 and 29.

Second, there is no suggestion or motivation to combine the references with a reasonable expectation of success. See MPEP § 2142. *Kepler* is directed to "cement mixtures which prevent or reduce the formation of micro-cracks and, more particularly, to an improved cement mixture of a conventional cement and a cement that is micro-encapsulated in time-release polymer coatings." *Kepler*, ¶ 0001. Nowhere does *Kepler* disclose or suggest use of the disclosed cement mixture in a well bore. Rather than being directed to preventing the formation of micro-cracks, *Harris* is directed to "a method of changing the direction of drilling a well bore wherein a cement plug is formed in the well bore at a location therein where the direction of drilling is to be changed and a pilot hole is drilled in the plug." *Harris*, Abstract. Accordingly, there is no motivation for combining *Kepler*'s cement mixtures (not disclosed for use in well bore) with *Harris*'s methods of changing the direction of drilling a well bore.

For the foregoing reasons, claims 10 and 29 are not obviated by *Kepler* in view of *Harris*. Accordingly, Applicants respectfully request withdrawal of this rejection with respect to claims 10 and 29.

**C. Claims 17 and 36 Are Not Obviated by *Kepler* in View of *Moradi*.**

The Examiner has rejected claims 17 and 36 over *Kepler* in view of U.S. Pat. No. 6,387,986 to Moradi-Araghi et al. ("*Moradi*"). (Office Action at 6.) With respect to this rejection, the Examiner stated:

[I]t would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified [*Kepler*'s] invention by using a specific degradable polymeric coating material in view of [*Moradi*]. The motivation for this combination is that the use of the specific degradable polymeric coating material allows for the degradation to occur in numerous ways.

(Office Action at 6.) Applicants respectfully disagree because the Examiner has not established a *prima facie* case of obviousness, in that the cited references do not teach or suggest each and every claim limitation. *See* MPEP § 2142.

In particular, *Kepler* does not teach or suggest the step of “placing a cement composition into the well bore” as recited in Applicants independent claims 1 and 23 upon which claims 17 and 36 depend. As discussed above with respect to the § 102 rejection, *Kepler* does not teach or suggest the step of placing a cement composition into the well bore. *See* discussion *supra* Part II. Nor can *Moradi* be used to supply this missing recitation. In fact, *Moradi* does not disclose or suggest the use of a cement composition. Rather, *Moradi* is directed to “encapsulated crosslinking agents, gel-forming compositions, and processes for producing and using encapsulated crosslinking agents and gel-forming compositions.” *Moradi*, col. 1, ll. 5-9. Accordingly, modifying *Kepler* to use the specific degradable polymer coating disclosed by *Moradi*, as suggested by the Examiner, would not teach or suggest placing a cement composition into the well bore. Therefore, *Kepler* in view of *Moradi* does not teach or suggest each and every limitation of independent claims 1 and 23.

Accordingly, independent claims 1 and 23 are not obviated by *Kepler* in view of *Harris*. Claims 17 and 36 depend, either directly or indirectly, on independent claims 1 and 23, respectively. Therefore, claims 17 and 36 contain all the limitations of their corresponding independent claim, and thus are allowable for at least the reasons cited above with respect to independent claims 1 and 23. Accordingly, Applicants respectfully request withdrawal of this rejection with respect to claims 17 and 36.

**D. Claims 49 and 67 Are Not Obviated by *Kepler* and *Simpson* in View of *Harris*.**

The Examiner has rejected claims 49 and 67 over *Kepler* and *Simpson* and further in view of *Harris*. (Office Action at 6.) Applicants respectfully disagree because the Examiner has not established a *prima facie* case of obviousness, in that the cited references do not teach or suggest each and every claim limitation, and there is no suggestion or motivation to combine the references with a reasonable expectation of success. *See* MPEP § 2142.

First, the cited references do not teach or suggest each and every limitation of claims 49 and 67, which depend, either directly or indirectly, from independent claims 41 and 62, respectively. *See* MPEP § 2142. In particular, independent claims 41 and 62 recite “placing a cement composition into the well bore.” Independent claim 41 recites that “the cement

composition comprises a first cementitious component having a first set time and a second cementitious component having a set second set time that is delayed relative to the first set time of the first cementitious component.” And independent claim 62 recites that “the cement composition comprises a first cementitious component having a first set time and a second cementitious component comprising microencapsulated cement particles, wherein the second cementitious component has a second set time that is delayed relative to the first set time of the first cementitious component.” For the reasons stated above with respect to the § 103 rejection over *Kepler* in view of *Simpson*, the combination of *Kepler* and *Simpson* does not teach these recitations. See discussion *supra* Part III.A.

Nor can *Harris* be used to supply this missing recitation. In fact, as discussed above with respect to the § 103 rejection over *Kepler* in view of *Harris*, *Harris* does not disclose or suggest the use of the recited cement composition. See discussion *supra* Part III.B. Therefore, *Kepler* and *Simpson* and further in view of *Harris* does not teach or suggest each and every limitation of independent claims 41 and 62. Because claims 49 and 67 depend, either directly or indirectly, on independent claims 41 and 62, respectively, these claims contain all the limitations of their corresponding independent claim, and thus *Kepler* and *Simpson* in view of *Harris* does not teach or suggest each and every limitation of claims 49 and 67.

Second, there is no suggestion or motivation to combine the references with a reasonable expectation of success. See MPEP § 2142. For the reasons stated above with the respect to the § 103 rejection over *Kepler* in view of *Simpson*, there is no motivation to combine *Kepler* and *Simspon*. See discussion *supra* Part III.A. Accordingly, there is no motivation to combine *Kepler* and *Simpson* in view of *Harris*.

For the foregoing reasons, claims 49 and 67 are not obviated by *Kepler* and *Simpson* in view of *Harris*. Accordingly, Applicants respectfully request withdrawal of this rejection with respect to claims 49 and 67.

**E. Claims 56 and 74 Are Not Obviated by *Kepler* and *Simpson* in View of *Moradi*.**

The Examiner has rejected claims 56 and 74 over *Kepler* and *Simpson*, and further in view of *Moradi*. (Office Action at 7.) Applicants respectfully disagree because the Examiner has not established a *prima facie* case of obviousness, in that the cited references do not teach or suggest each and every claim limitation, and there is no suggestion or motivation to combine the references with a reasonable expectation of success. See MPEP § 2142.

First, the cited references do not teach or suggest each and every limitation of claims 56 and 74, which depend, either directly, or indirectly, from independent claims 41 and 62, respectively. *See* MPEP § 2142. In particular, independent claims 41 and 62 recite “placing a cement composition into the well bore.” Independent claim 41 recites that “the cement composition comprises a first cementitious component having a first set time and a second cementitious component having a set second set time that is delayed relative to the first set time of the first cementitious component.” And independent claim 62 recites that “the cement composition comprises a first cementitious component having a first set time and a second cementitious component comprising microencapsulated cement particles, wherein the second cementitious component has a second set time that is delayed relative to the first set time of the first cementitious component.” For the reasons stated above with respect to the § 103 rejection over *Kepler* in view of *Simpson*, the combination of *Kepler* and *Simpson* does not teach these recitations. *See* discussion *supra* Part III.A.

Nor can *Moradi* be used to supply this missing recitation. In fact, *Moradi* does not disclose or suggest the use of a cement composition. Rather, *Moradi* is directed to “encapsulated crosslinking agents, gel-forming compositions, and processes for producing and using encapsulated crosslinking agents and gel-forming compositions. *Moradi*, col. 1, ll. 5-9. Therefore, *Kepler* and *Simpson* and further in view of *Moradi* does not teach or suggest each and every limitation of independent claims 41 and 62. Because claims 56 and 72 depend, either directly or indirectly, on independent claims 41 and 62, respectively, these claims contain all the limitations of their corresponding independent claim, and thus *Kepler* and *Simpson*, in view of *Moradi* does not teach or suggest each and every limitation of claims 56 and 72.

Second, there is no suggestion or motivation to combine the references with a reasonable expectation of success. *See* MPEP § 2142. For the reasons stated above with the respect to the § 103 rejection over *Kepler* in view of *Simpson*, there is no motivation to combine *Kepler* and *Simspon*. *See* discussion *supra* Part III.A. Accordingly, there is no motivation to combine *Kepler* and *Simpson* in view of *Moradi*.

For the foregoing reasons, claims 56 and 72 are not obviated by *Kepler* and *Simpson* in view of *Moradi*. Accordingly, Applicants respectfully request withdrawal of this rejection with respect to claims 56 and 72.



**IV. Remarks Regarding Claim Objections.**

The Examiner has objected to claims 19-21, 38-40, 58-60, and 76-78 as being dependent upon a rejected base claim, but indicated that such claims would be allowable if rewritten in independent form. (Office Action at 8.) The Applicants gratefully acknowledge the Examiner's indication of the allowability of these claims.

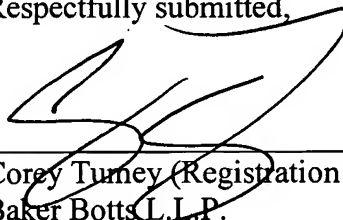
In light of the above remarks with respect to independent claims 1, 23, 41, and 62, such independent claims are patentable in view of the cited references. Claims 19-21, 38-40, 58-60, and 76-78 depend either directly or indirectly on their corresponding independent claims. These dependent claims, which includes all the limitations of their corresponding independent claim, are allowable for at least the reasons cited above with respect to independent claims 1, 23, 41, and 62. Accordingly, the Applicants respectfully request withdrawal of this objection with respect claims 19-21, 38-40, 58-60, and 76-78.

**SUMMARY**

In light of the above remarks, Applicants respectfully request reconsideration and withdrawal of the outstanding objections and rejections. Applicants further submit that the application is now in condition for allowance, and earnestly solicit timely notice of the same. Should the Examiner have any questions, comments or suggestions in furtherance of the prosecution of this application, the Examiner is invited to contact the attorney of record by telephone, facsimile, or electronic mail.

Applicants believe that there are no fees due in association with the filing of this Response. However, should the Commissioner deem that any fees are due, including any fees for extensions of time, Applicants respectfully request that the Commissioner accept this as a Petition Therefor, and direct that any additional fees be charged to Baker Botts L.L.P. Deposit Account No. 02-0383, (*formerly Baker & Botts, L.L.P.*) Order Number 063718.0322.

Respectfully submitted,



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